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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,128	01/07/2002	Fufang Zha	USFMCRC.066C3	3616

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EXAMINER

SORKIN, DAVID L

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 06/20/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/042,128	ZHA ET AL.	
	Examiner	Art Unit	
	David L. Sorkin	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 April 2003.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 1-32 in Paper No. 11 is acknowledged. While applicant states in applicant's remarks "cancel claim 33", it is considered that claim 33 is still pending, but withdrawn from consideration, because the amendment of Paper No. 11 indicates that claim 33 is "withdrawn" rather than canceled.

***Specification***

2. The first sentence of the specification, inserted in the preliminary amendment filed 07 January 2002, is objected to because it incorrectly states that Application No. 09/336,059 "is the national phase under 35 U.S.C. §371" of PCT/AU97/00855. In actuality, 09/336,059 is a continuation of PCT/AU97/00855. It is suggested that the first line of the specification read:

- - This application is a continuation of US Application No. 09/336,059, filed June 18, 1999, now US Patent No. 6,555,005, which is a continuation of International Application No. PCT/AU97/0085, filed on Dec. 18, 1997, which designated the United States and which was published by the International Bureau in English on July 2, 1998. - -

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 22-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. These claims contains subject matter

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is considered that the new limitation add to claim 22, "wherein said one potting head is not connected to a source of feed liquid to be filtered" is not supported by the originally filed specification. This potting head corresponds to reference sign "7" in the specification and drawings. It is clear from, for example, Figs. 5 and 7 that this potting head is directly exposed to the feed liquid, which is essentially the opposite of what is now being claimed.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 13-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Each of claims 13, 15, 16 and 17 depends from claim 9 and recites "the means for providing gas bubbles". However, the recitation of "means for providing gas bubbles" was deleted by amendment from claim 9. Therefore, there is lack of antecedent basis for "the means for providing gas bubbles" and it is unclear what the scope of claims 13-18 is. It is unclear if these claims invoke section 112, sixth paragraph. Dependent claims must not be broader than their corresponding independent claim(s).

#### ***Double Patenting***

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to

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identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claim 34 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 6,555,005. This is a double patenting rejection. All the limitations of instant claim 34 are recited in claim 1 of US 6,555,005 and all the limitations of claim 1 of US 6,555,005 are recited in instant claim 1. It is noted that in the first line of claim 1 of US 6,555,005 recites "removing founding materials", while instant claim 1 recites "removing fouling materials"; however, the prosecution history of US 6,555,005 clearly indicates that the version of claim 1 that was allowed by the examiner recited "removing fouling materials" and the word "founding" erroneously appears in the printed version of the patent.

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1 and 3-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6,555,005 (filed as Application No. 09/336,059). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 13 of US 6,555,005 includes all the limitations of each of instant claims 1, 3 and 4. It is noted that in the first line of claim 1 of US 6,555,005 recites "removing founding materials", while instant claim 1 recites "removing fouling materials"; however, the prosecution history of US 6,555,005 clearly indicates that the version of claim 1 that was allowed by the examiner recited "removing fouling materials" and the word "founding" erroneously appears in the printed version of the patent.

11. Claims 2 and 6-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claim set of U.S. Patent No. 6,555,005. Instant claims 2 and 6-8 depend from claim 1, which was discussed in the immediately-above paragraph. While no single claim of US 6,555,005 includes all the limitations of any of instant claims 2 and 6-8, claims 13 and 2 of US 6,555,005, taken together, disclose all the limitations of instant claim 2, claims 13 and 4 of US 6,555,005, taken together, disclose all the limitations of instant claim 7, claims 13 and 5 of US 6,555,005, taken together, disclose all the limitations of instant claim 8, and claims 13 and 8 of US 6,555,005, taken together, disclose all the limitations of instant claim 6. It is considered that it would have been obvious to one of ordinary skill in the art to have combined the limitations of claims explicitly listed together in a claim set.

12. Likewise, claim 27 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6,555,005. Claim 13 of claim 13 of US 6,555,005 includes all the limitations of instant claim 27, except that US 6,555,005 uses that phrase "dislodge fouling materials" instead of the phrase "remove accumulated solids". It is considered that the phrase "dislodge fouling materials" would have implied or suggested the removal of accumulated solids to one of ordinary skill in the art, especially considering other claims in US 6,555,005, such as 17 and 18 explicitly refer to removal of accumulated solids.

13. Claims 28-30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claim set of U.S. Patent No. 6,555,005. Instant claims 28-30 depend from instant claim 27, which was discussed in the immediately-above paragraph. While no single claim of US 6,555,005 includes all the limitations of any of instant claims 28-30, claim 2 of US 6,555,005 discloses all the further limitations of instant claim 28, claim 22 of US 6,555,005 discloses all the further limitations of instant claim 29, and claim 23 of US 6,555,005 discloses all the further limitations of instant claim 30. It is considered that it would have been obvious to one of ordinary skill in the art to have combined the limitations of claims explicitly listed together in a claim set.

14. Note: the rejection of claims 13-18 herein below is to the extend understood, as it is unclear what is being claimed as discussed above regarding section 112, second paragraph.

15. Claims 9, 11-13 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6,555,005. Though claim 13 of US 6,555,005 is a method claim and claims 9, 11-13 and 19 are apparatus claims, it is considered that claim 13 of US 6,555,005 requires use of the module of instant claims 9, 11-13 and 19. It is noted that no restriction requirement has been made in any relevant application between the module and method of using. Claim 13 of US 6,555,005 requires (use of) a module having all the limitations of instant claims 9, 11-13 and 19.

16. Likewise claim 21 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,555,005. Claim 15 of US 6,555,005 requires (use of) a module having all the limitations of instant claim 21.

17. Claims 10, 14-18, 20, 31 and 32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claim set of U.S. Patent No. 6,555,005. Instant claims 2 and 6-8 depend from claim 9, the obviousness-type double patenting rejection of which was discussed above. While no single claim of US 6,555,005 includes all the limitations of any of instant claims 10, 14-18 and 20, claims 13 and 2 of US 6,555,005, taken together, disclose all the limitations of instant claim 10, claims 13 and 6 of US 6,555,005, taken together, disclose all the limitations of instant claim 14, claims 13 and 7 of US 6,555,005, taken together, disclose all the limitations of instant claim 15, claims 13 and 8 of US 6,555,005, taken together, disclose all the limitations of instant claim 16, claims 13 and 9 of US 6,555,005, taken together,



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disclose all the limitations of instant claim 17, claims 13 and 10 of US 6,555,005, taken together, disclose all the limitations of instant claim 18, claims 13 and 11 of US 6,555,005, taken together, disclose all the limitations of instant claim 20, claims 13 and 16 of US 6,555,005, taken together, disclose all the limitations of instant claim 31 and claims 13 and 17 of US 6,555,005, taken together, disclose all the limitations of instant claim 32. It is considered that it would have been obvious to one of ordinary skill in the art to have combined the limitations of claims explicitly listed together in a claim set.

18. Applicant is advised that should claim 3 be found allowable, claim 5 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). It is considered that the amendment in paper No. 11 of claim 1 (from which claims 3 and 5 depend) caused claim 3 to include all the limitations of claim 5.

19. While the scope of claim 13 is unclear, as discussed above regarding section 112, second paragraph, as best understood it is a substantial duplicate of claim 9 and, if found to be allowable would be objected to under 37 CFR 1.75. It is considered that the amendment in paper No. 11 of claim 9 caused it to include all the limitations of claim 13. to the extent that claim 13 is understood.

***Response to Arguments***

20. While applicant has filed a terminal disclaimer ~~of~~ with regard to US 6,156,200, the double patenting rejections based upon Application No. 09/336,059, now US 6,555,005 were not addressed.

***Conclusion***

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 703-308-1121. The examiner can normally be reached on 8:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*David Sorkin*

David Sorkin

June 13, 2003

*W. L. Walker*  
W. L. WALKER  
SUPERVISORY PATENT EXAMINER  
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